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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/626,746

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EXAMINER

VU, THANH T

ART UNIT

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2174

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/626,746	Applicant(s) BEU ET AL.	
	Examiner Thanh T. Vu	Art Unit 2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 June 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06/22/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This communication is responsive to Amendment, filed 06/25/2007.

Claims 1-27 are pending in this application. In the Amendment, claims 1, 14, and 27 were amended. This action is made Final.

#### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 8-18 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Messinger et al. ("Messinger", U.S. Pat. No. 7,000,187) and Rockey et al.. ("Rockey", Pub. No. US 2004/0268259).

Per claim 1, Messinger teaches system for acquiring information and functions from a database, comprising:

at least one context object containing a data record that has information and functions from the database and a context-specific menu that has a control component enabling access by a user to the context object (see figs. 2 and 13A, *context object 42a-d; context-specific menu 400*; see col. 8, lines 34-50);

a context manager and a display device displaying a context display for visualizing the selected context objects (figs. 9 and 13; *current task 42b and steps are displayed to the user*).

Although Messinger teaches a particular tasks displayed in the list of task indication may be presented to the use a function of a mode setting (col. 2, lines 41-45; col. 12, lines 30-41), Messinger does not specifically teach automatically determining a current context of the user by at least one of a position in space, a work object and a work task of the user, dynamically selecting the context object as a function of the current context of the user and automatically offering the selected context objects to the user without requiring the user to make individual preselections. However, Rockey et al. teaches automatically determining a current context of the user by at least one of a position in space, a work object and a work task of the user, dynamically selecting the context object as a function of the current context of the user and automatically offering the selected context objects to the user without requiring the user to make individual preselections ([0017] *shows determining the user's context within a task and dynamically presenting a UI context sensitive commands.*) Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Rockey in the invention of Messinger in order to provide systems of presenting commands in a task sensitive manner, which assist in using physical screen space in a more efficient manner ([0016]).

Per claim 2, the modified Messinger teaches the system as recited in Claim 1, wherein the context objects are assigned granularity levels, wherein the context manager comprises a granularity regulator selecting the context objects from a selection range as a function of a selected granularity level, and wherein the size of the selection range is dependent on the granularity level selected (Messinger, fig. 13c; see col. 12, lines 15-27, *which shows different levels menu (granularity levels) of context objects*).

Per claim 3, the modified Messenger teaches the system as recited in Claim 2, wherein the assignment of the granularity levels of the context objects is at least one of an automatic assignment and a user-guided assignment of the granularity level (Messenger, fig. 13c; col. 12, lines 15-27; *level menu 430*).

Per claim 4, the modified Messenger teaches the system as recited in Claim 1, wherein the control component of the context-specific menu enables access by the user to the information and the functions and enables removal by the user of the selected context objects from the context display (Messenger, col. 12, lines 28-42, *which shows task list are based on user's privilege on the network*).

Per claim 5, the modified Messenger teaches the system as recited in Claim 1, further comprising at least one of an automatic context registration and a manual context registration providing, respectively, an automatic and a user-guided generation of the selected context objects from the context of the user (Messenger, col. 12, lines 15-20 and lines 35-41; *level menu and user's privilege*).

Per claim 8, the modified Messenger teaches the system as recited in Claim 1, wherein the context of the user is determined additionally as a function of communication partners of the user (Messenger, col. 12, lines 35-41).

Per claim 9, the modified Messenger teaches the system as recited in Claim 5, further comprising references prompting the context manager to select the context objects from the context of the user by the manual context registration, wherein the references comprise at least one of entries in the context-specific menu or marks on real objects in a space (Messenger, col. 12, lines 35-41).

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Per claim 10, the modified Messenger teaches the system as recited in Claim 1, wherein the display device is a mobile display (Messenger, fig. 1; *mobile display 10a-b*).

Per claim 11, the modified Messenger teaches the system as recited in one of the preceding claims, wherein the control component selects the context objects to be visualized on the display device by the user (Messenger, figs. 9 and 13; *current task 42b and steps are displayed to the user*).

Per claim 12, the modified Messenger teaches the system as recited in Claim 1, further comprising a further control component generating messages regarding external information, wherein the context of the user is determined additionally as a function of the messages (Messenger, col. 8, lines 34-39).

Per claim 13, the modified Messenger teaches the system as recited in Claim 1, wherein the database is configured for receiving notes of the user that are linked to the context of the user, the notes being classified as one of private, public, and relevant to data maintenance (Messenger, col. 12, lines 9-15; level menu and user's privilege).

Claims 14-18 and 21-26 are rejected under the same rationale as claim 1-5 and 8-13 respectively.

Claim 27 is rejected under the same rationale as claim 1.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-7, and 19-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Messinger et. al., Rockey and Raghavan et al. "Interactive Evaluation of Assembly Sequences Using Augmented Reality".

the modified Messinger teaches the method of claim 5, but does not specifically teach a tracking system ,detecting and recognizing real objects in a space, the tracking system comprising at least one image detection unit detecting the real objects and a computer unit processing information output by the image detection unit, wherein the processed information from the tracking system is provided to the automatic context registration for automatic generation of the context of the user, and a workflow engine monitoring and controlling a work task of the user, wherein information supplied by the workflow engine is provided to the automatic context registration for automatic generation of the context of the user. However, Raghavan teaches a tracking system ,detecting and recognizing real objects in a space, the tracking system comprising at least one image detection unit detecting the real objects and a computer unit processing information output by the image detection unit, wherein the processed information from the tracking system is provided to the automatic context registration for automatic generation of the context of the user (see page 438, *virtual components are displayed on head-mount display*), and a workflow engine monitoring and controlling a work task of the user, wherein information supplied by the workflow engine is provided to the automatic context registration for automatic generation of the context of the user (see page 440). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include the teaching of Raghavan in the invention of the modified Messinger in order to provide the user

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with the augmented reality interface that can prompt the user through various steps and the sensors help in automatically recording the actual moves of the user to further help with the evaluation process. This enables a convenient flow of information between the design engineer and the computer assembly planner.

Claims 19 and 20 are rejected under the same rationale as claim 6 and 7 respectively.

### ***Response to Arguments***

Applicant's arguments with respect to the amendment have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Inquiries***




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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh T. Vu whose telephone number is (571) 272-4073. The examiner can normally be reached on Mon-Thur and every other Fri 7:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine L. Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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